

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/517,775	12/27/2004	Luc Schrive	263889US2PCT	7582
22850	7590 03/14/2006		EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.			SAVAGE, MATTHEW O	
1940 DUKE ALEXAND	STREET RIA, VA 22314	ART UNIT	PAPER NUMBER	
·	,		1724	
		DATE MAILED: 03/14/2006		

Please find below and/or attached an Office communication concerning this application or proceeding.

	· ·	_		V				
		Application No.	Applicant(s)					
Office Action Commons		10/517,775	SCHRIVE ET AL.					
	Office Action Summary	Examiner	Art Unit					
		Matthew O. Savage	1724					
Period fo	The MAILING DATE of this communication apports. The mail of Reply	pears on the cover sheet w	vith the correspondence addres	:s				
WHI - Exte after - If NO - Fails Any	IORTENED STATUTORY PERIOD FOR REPL CHEVER IS LONGER, FROM THE MAILING D insions of time may be available under the provisions of 37 CFR 1.1 or SIX (6) MONTHS from the mailing date of this communication. Depend for reply is specified above, the maximum statutory period ure to reply within the set or extended period for reply will, by statute reply received by the Office later than three months after the mailing led patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUN 36(a). In no event, however, may a will apply and will expire SIX (6) MC a, cause the application to become A	IICATION. a reply be timely filed DNTHS from the mailing date of this communication ABANDONED (35 U.S.C. § 133).	·				
Status								
1)⊠	Responsive to communication(s) filed on 09 J	anuary 2006.						
	This action is FINAL . 2b) This action is non-final.							
3)[Since this application is in condition for allowance except for formal matters, prosecution as to the merits is							
	closed in accordance with the practice under the	Ex parte Quayle, 1935 C.	D. 11, 453 O.G. 213.					
Disposit	ion of Claims							
4)🖂	Claim(s) <u>14-26</u> is/are pending in the application							
5)□	4a) Of the above claim(s) <u>14-20 and 25</u> is/are withdrawn from consideration. 5) Claim(s) is/are allowed.							
·	6)⊠ Claim(s) <u>21-24 and 26</u> is/are rejected.							
	Claim(s) <u>27-24 and 20</u> is/are rejected. Claim(s) is/are objected to.							
8)	Claim(s) are subject to restriction and/o	or election requirement.						
Applicat	ion Papers			•				
	The specification is objected to by the Examine	ar						
-	The drawing(s) filed on is/are: a) acc		by the Examiner.					
,—	Applicant may not request that any objection to the							
	Replacement drawing sheet(s) including the correct			.121(d).				
11)	The oath or declaration is objected to by the Ex	kaminer. Note the attache	ed Office Action or form PTO-1	52.				
Priority (under 35 U.S.C. § 119							
	Acknowledgment is made of a claim for foreign ☑ All b) ☐ Some * c) ☐ None of:	priority under 35 U.S.C.	§ 119(a)-(d) or (f).					
	1. Certified copies of the priority document	s have been received.						
	2. Certified copies of the priority document	s have been received in	Application No					
	3. Copies of the certified copies of the prior	rity documents have bee	n received in this National Stag	je				
	application from the International Burea	• • • • • • • • • • • • • • • • • • • •	•					
* (See the attached detailed Office action for a list	of the certified copies no	t received.					
Attachmen	t(s)							
1) Notic	e of References Cited (PTO-892)		Summary (PTO-413)					
	ee of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08)		(s)/Mail Date Informal Patent Application (PTO-152)	· ·				
	rr No(s)/Mail Date <u>1/18/05</u> .	6) Other:	· · · · · · · · · · · · · · · · · · ·	•				

Art Unit: 1724

Applicant's election with traverse of group II, species E2, S1, and W1 in the reply filed on 1-9-06 is acknowledged. The traversal is on the ground(s) that no explanation of why each group lacks unity with each other group has been made. This is not found persuasive because the restriction requirement clearly points out that the shared technical features of independent claims 14 and 21 fail to provide a contribution over the cited prior art, i.e., U.S. Patent 6,491,820 to Held et al disclose the recited separation means 52 and pulsed electric field means 46, 48, 50.

The requirement is still deemed proper and is therefore made FINAL.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 21-24, and 26 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The specification fails to disclose how to construct a means for subjecting the flow of the effluent to a pulsed electric field that includes adjustable voltage value, current value, pulse repletion frequency, and voltage front shape characteristics.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

Art Unit: 1724

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 21-24 and 26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With respect to claim 21, it is unclear as to how the voltage value, current value, pulse repetition frequency, and voltage front shape characteristics are adjustable since no structure for enabling such a function has been recited in the claim.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-24 and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 6,030,538 to Held.

With respect to claim 1, Held discloses means 52 for subjecting a flow of effluents to solid/liquid separation, and means 46, 48, 50 for subjecting the flow of effluents to a pulsed electric field (see FIG. 1), the separating means and pulsed electric field means being located at different locations along the effluent flow, the pulsed electric field means operating to a discharge mode obtained by a capacitor (e.g., included in the capacitive discharge circuit 48) powered by a dc power supply 50, the electric field means being adjustable (e.g., since various voltage and frequency ranges are disclosed in the first full paragraph of col. 8).

Art Unit: 1724

Concerning claim 22, Held discloses means 48 operating on a charge-discharge mode since it is a capacitive discharge circuit.

As to claim 23, Held discloses a membrane filtration means 52.

Concerning claim 24, Held discloses frontal filtration with the membrane filtration means 52.

As to claim 26, Held discloses the pulsed field as being adjusted to modify physiochemical and biological characteristics of the effluent (see the second full paragraph of col. 8).

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew O. Savage whose telephone number is (571) 272-1146. The examiner can normally be reached on Monday-Friday, 7:00am-3:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on (571) 272-1166. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1724

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

M. Saves Matthew O Savage Primary Examiner Art Unit 1724 Page 5

mos March 10, 2006